

REMARKS

Reconsideration and allowance in view of the foregoing amendment and the following remarks are respectfully requested.

Claims 1-21 remain pending. Claim 1 of the present application has been amended at paragraph (b) by adding a limitation that the upper cross member of the side shift frame is located above and in engagement with the frame support member of the lift truck carriage. The remaining amendments to claims 1 2, 3, and 5 are intended to more clearly claim the present invention.

The invention claimed in amended claim 1 is directed to a fork movement assembly is capable of achieving the functions of side shifting and fork positioning, and providing these two functions with reduced lost load. The term "lost load" refers to the undesirable effect of moving the forks, and thereby the load center, further forward of the lift truck. Specifically, the lost load causes decreased load capacity of the lift truck, or alternatively, requires an increased counter weight (which could also be accomplished by moving the counter weight rearwards).

The invention claimed in claim 1 achieves the advantage of reduced lost load by: (i) providing structure located so that the rear surface of the shank portions of the forks are positioned no further forward than the front face of the upper cross member of the side shift frame; (ii) positioning and supporting the upper cross member of the side shift frame on the lift truck carriage; and (iii) locating the side shift operator means in the frame support member. By way of further explanation of point (ii) above, the invention claimed in claim 1 includes a upper contact surface on the frame support member of the carriage which supports and engages a lower contact surface of the upper cross member of the side shift frame (which slides on the frame support member). The combination of the above three features provides the advantage of a reduced lost load.

Claim 14 is directed to an improved side shift assembly which reduces lost load and protects the moving parts of the assembly, such as the side shift operator means.

As claimed in claim 14, the advantages are accomplished by supporting and positioning the side shift frame on the lift truck carriage, as discussed in point (ii) for claim 1 above. As also claimed in claim 14, the advantages are accomplished by locating the side shift operator means in the frame support member of the carriage, and by providing the upper cross member of the side shift frame with a planar front portion which covers the front face of the frame support member in which the moving parts are located.

Claim 21 is directed to an improved combination of a side shifter and fork positioner. The side shifter/fork positioner of claim 21 provides the advantage of reduced lost load by: (i) providing structure located so that the rear surface of the shank portions of the forks are positioned no further forward than the front face of the upper cross member of the side shift frame; (ii) sliding the upper cross member of the side shift frame on the frame support member of the carriage; and (iii) locating the side shift means in the frame support member of the lift truck carriage.

Claims 1-21 were rejected under 35 USC 103(a) as unpatentable over "the brochure" in view of German Publication No. 19805790. Applicant respectfully traverses this rejection.

The brochure entitled "Behind every movement there is a great idea" discloses three different designs of side shifter/fork positioner combination assemblies. The first of these (see 2nd page of brochure), referred to as "PFS", is designed to be hung on to a standard lift truck carriage. The second of these (see 3rd page), referred to as "DSI", is integrally constructed with a custom lift truck carriage. The third appears to be very similar to the "DSI" design.

The DSI design bears some similarities to the invention. More particularly, the DSI design appears to disclose a side shift operator means located in the lift truck carriage and an upper cross member of the side shift frame located above and slides on the frame support member of the carriage. However, the DSI design does not disclose fork positioning capability where the rear surface of the forks is no further forward than the front face of the upper cross member of the frame (as claimed in claims 1 and 21).

Furthermore, the DSI design does not disclose an upper cross member of the side shift frame with a planar front portion to protect the frame support member (as claimed in claim 14).

For these reasons, the brochure does not anticipate the present invention.

German Publication No. 19805790 ('790 Publication) shows a combination of a side shifter and a fork positioner (see Figs. 4 and 6). The fork positioner is hung on the side shifter (see part 28 of Figure 1). Figure 6 of the '790 Publication appears to disclose that combining the fork positioner and side shifter in the manner shown would locate the rear surface of the forks no further forward than the side shift frame.

However, the side shifter disclosed in the '790 Publication is hung on the carriage of a lift truck (see part 36 of Figure 6). Accordingly, the '790 Publication does not disclose an upper cross member of the side shift frame (part 34 in Fig. 3) which is located above and slides on the frame support member of the carriage, as claimed in claims 1, 14 and 21. By using a hanger member (part 36) to attach the side shifter to the carriage, the upper cross member of the side shift frame (and thereby the forks) are located further forward than in the claimed invention. This arrangement has the disadvantage of increased lost load.

In addition, the '790 Publication does not disclose a planar front portion of the side shift frame which covers the frame support member, as claimed in claim 14. Finally, the '790 Publication does not disclose a side shift operator means located in the carriage (see part 37 in Fig. 3), as claimed in claims 1, 14, and 21.

For all of the above reasons, the '790 Publication does not anticipate the present invention either.

In order to prove obviousness, a challenger must present prior art references which disclose the claimed subject matter of the patent/application in question. If separate prior art references each disclose separate elements of a claim, the challenger must also show some teaching, suggestion, or incentive in the prior art that would have

led one of ordinary skill in the art to make the claimed combination. See, e.g., Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 297 n.24, 304-05 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986). In determining obviousness, there must be some reason other than hindsight for selectively combining the prior art references to render the claimed invention obvious. See, e.g., Interconnect Planning Corp. v. Feil, 774 F.2d 1132, 1143 (Fed. Cir. 1985).

As noted above, the '790 Publication discloses what appears to be a hang-on fork positioner (see Fig. 1) which is attached to a side shifter by a hanger member (part 28). This design requires a corresponding structure in the side shift frame. Accordingly, the fork positioner of the '790 Publication cannot be combined with any other side shifter without redesigning the side shifter to accept the fork positioner. The Applicant respectfully submits that such a redesign would not be obvious to a mechanic with ordinary skill in the art.

The DSI assembly disclosed in the brochure is an integrally constructed assembly where the side shifting and fork positioning functions are highly integrated in the design, and cannot be easily separated. In order to combine the DSI assembly with the fork positioner of the '790 Publication, one would have to first remove the fork positioning functionality from the DSI assembly and then modify it to function with the fork positioner of the '790 Publication. Such a task would require a complete redesign of the DSI assembly which would require inventive skill. Furthermore, there is no disclosure in the brochure which hints at such a redesign. In fact, there would be no reason to consider such a redesign because both the fork positioning and side shifting capability are already provided.

It is clear that the initial burden of establishing a basis for denying patentability to a claimed invention rests upon the Examiner. In re Piasecki, 745 F. 2d 1468, 223 U.S.P.Q. 785 (Fed Cir. 1984). In establishing a *prima facie* case of obviousness under 35 U.S.C. § 103, it is incumbent upon the Examiner to provide a reason why one of ordinary skill in the art would have been led to arrive at the claimed invention from the prior art. Ex part Clapp, 227 U.S.P.Q. 972 (BPAI 1985). To this end, the requisite

motivation must stem from some teaching, suggestion or inference in the prior art as a whole or from the knowledge generally available to one of ordinary skill in the art and not from applicant's disclosure. See, for example, Uniroyal, Inc. v. Rudkin-Wiley Corp. 837 F.2d, 7 U.S.P.Q.2d 1434 (Fed. Cir. 1988).

For the reasons discussed above, the Applicant respectfully submits that there is no motivation to and it would not be obvious to combine the fork positioner of the '790 Publication with the assemblies disclosed in the brochure.

Claims 1-21 were rejected under 35 USC 103(a) as being unpatentable over either Kaup or German Publication No. 2716704 or Abels or Ellis Jr in view of French Patent No. 2306931, British Patent No. 964161 and German Publication No. 19805790. Applicant respectfully traverses this rejection.

US Patent No. 5,913,654 (Kaup) discloses a side shift assembly which hangs on a lift truck carriage frame. However, Kaup does not disclose an upper cross member of the side shift frame (i.e. that portion of the frame which supports the forks) which is positioned above the frame support member of the lift truck carriage. In addition, Kaup does not disclose a side shift operator means (i.e. pistons) which are located in the frame support member of the carriage. Instead, the side shift frame disclosed in Kaup hangs forward of the carriage, and the pistons are attached to the side shift frame (see Figure 2, parts 11, 2, and 18).

German Publication No. 2716704 ('704 Publication) also discloses a side shift assembly which hangs onto the frame support member of the carriage (see part 2 of Figure 2). The '704 Publication does not disclose an upper cross member of the side shift frame which is located above and slides on the frame support member. In addition, the side shift operator means of the '704 Publication is located in the side shift frame, rather than in the frame support member of the carriage.

U.S. Patent No. 4,125,199 (Abels) discloses one embodiment of a side shift assembly (see Fig. 11) where the upper cross member of the side shift frame is

supported by the carriage and the side shift means is located in the frame support member of the carriage. However, the upper cross member of the side shift frame does not cover the front face of the frame support member, as claimed in claim 14.

U.S. Patent No. 3,734,327 (Ellis, Jr.) discloses a side shift assembly where the upper cross member of the side shift frame is located below the frame support member of the carriage (see Figure 6, part 90). The upper cross member of the side shift frame does not slide along the frame support member of the carriage.

French Patent No. 2306931 ('931 Patent) again discloses a side shift assembly which hangs on to the carriage of a fork lift (see Figure 3, part 24). The side shift operator means of the '931 Patent is not located in the frame support member of the carriage, but is attached to the side shift frame between the horizontal members thereof (see Figure 1). In addition, the upper cross member of the side shift frame is not located above the frame support member of the carriage and does not slide thereon.

British Patent No. 964,161 ('161 Patent) discloses a side shift assembly where the upper cross member of the side shift frame is located below the frame support member of the carriage (see Figure 1, parts 44 and 60). Accordingly, the side shift frame does not slide on the frame support member.

In summary, all of the references discussed above only disclose side shifters. For the reasons discussed above, none of the above references disclose all of the limitations of the side shifter claimed in claim 14.

In addition, none of the above references disclose the possibility of combining the side shifters disclosed therein with a fork positioner, as claimed in claims 1 and 21.

The Examiner bears the burden of establishing the existence of either 1) some objective teaching in the prior art or 2) knowledge generally available to one of ordinary skill in the art which would lead that individual to change the primary reference. In re Jones, 21 USPQ2d 1941, 1943-44 (Fed. Cir. 1992).

As the CAFC has said, obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination. ACS Hospital Systems v Montefiore Hospital, 221 USPQ 929, 933 (Fed. Cir. 1984). There must be a suggestion in the art relied upon to use what one reference discloses in or in combination with the disclosure of the other reference or references relied upon by the Examiner. In re Grabiak, 226 USPQ 870, 872 (Fed. Cir. 1986).

Even if the side shifters disclosed in Kaup, the '704 Publication, Ellis Jr., '931 Patent, or '161 Patent were to be combined with the fork positioner of the '790 Publication, such a combination would not disclose all of the limitations claimed in claims 1 and 21 of the present invention.

With respect to Abels, Figure 11 of Abels shows the frame support member of the carriage (see part 104) located between the upper and lower horizontal members (see parts 105a and 105b) of the side shift frame. The frame support member is in contact with both the upper and lower members of the side shift frame.

The fork positioner of the '790 Publication locates in the space between the upper and lower horizontal members of the side shift frame (see Fig. 4). In order to attach the fork positioner of the '790 Publication to a side shifter, such a side shifter would require sufficient space between the upper and lower horizontal members of the side shift frame to accommodate the fork positioner. Accordingly, the fork positioner of the '790 Publication cannot be connected to the Abels side shifter because there is no space available to accommodate the fork positioner. The Abels side shifter would have to be completely redesigned to accommodate the fork positioner of the '790 Publication. The Applicant respectfully submits that such a redesign would require inventive skill. Furthermore, there is no disclosure in Abels which points to combining the Abels side shifter with a fork positioner. For these reasons, it would not be obvious to combine the Abels side shifter with the fork positioner of the '790 Publication.


US Patent No. 5,338,148 (Rönnblom), which was cited but not applied, discloses another hang-on assembly which appears to provide both side shifting and fork positioning functionality. The upper cross member of the side shift frame of Rönnblom is located below the frame support member (see Figure 1, parts 7 and 14) and the side shifting operator means is located on the frame (see Figure 1, part 23). Accordingly, the upper cross member of the side shift frame is not located above the frame support member of the carriage, as claimed in claims 1 and 14. In addition, the side shift operator means is not located in the frame support member, as claimed in claims 1, 14, and 21.

The Applicant respectfully submits that, for all of the above reasons, claims 1 (as amended), 14, and 21 are allowable. Because claims 2-13 and 15-20 depend from an allowable claim, the applicant respectfully submits that these claims are also allowable.

All objections and rejections having been addressed, it is respectfully submitted that the present application is in condition for allowance and an early Notice to that effect is earnestly solicited.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: 
Michelle N. Lester
Reg. No. 32,331

MNL:sj
1100 North Glebe Road, 8th Floor
Arlington, VA 22201-4714
Telephone: (703) 816-4000
Facsimile: (703) 816-4100